Workstream:

**Funding** 

## **CONFIDENTIAL**

# Perspective on Funding Sources for NCDOT



Document for Discussion August 16, 2007

## **SUMMARY**

•NCDOT needs more funding to maintain its transportation network, meet its long-term transportation priorities, and support North Carolina's rapid growth.

### • There are 7 new sources of funding NCDOT should explore:

- Hotel-Occupancy Taxes
- Car Rental Taxes
- Mileage-Based Tolling on Urban Loops
- Local Taxes on Real Property
- Local Taxes on Vehicle Property
- General Fund Transfers
- Encroachment Fees

### •NCDOT should explore increasing 5 of its <u>current</u> sources of funding:

- Highway Use Tax
- Vehicle Registration Fees
- Motor Vehicle Record Fees for Bulk Purchasers
- Debt Financing
- Federal Highway Trust Fund Returns

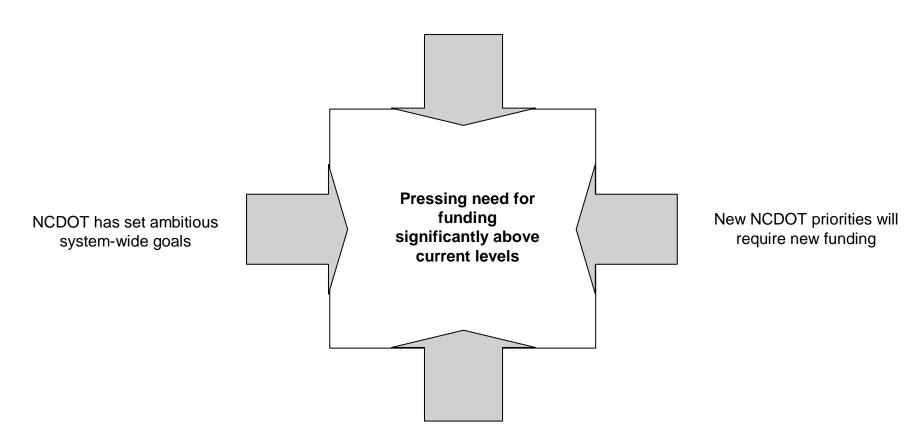
## • From these sources of funds, there are three combinations which could bear major returns for NCDOT:

- Going for a shot-in-the arm win with across-the-board increases in local property taxes
- Tapping sources of funding most directly related to transportation, such as tolling urban loops and raising the Highway Use Tax
- Focusing tax and fee increases on businesses and out-of-state citizens, by beginning statewide hoteloccupancy taxes and car rental taxes, increasing motor vehicle record fees for bulk purchasers, and instituting encroachment fees

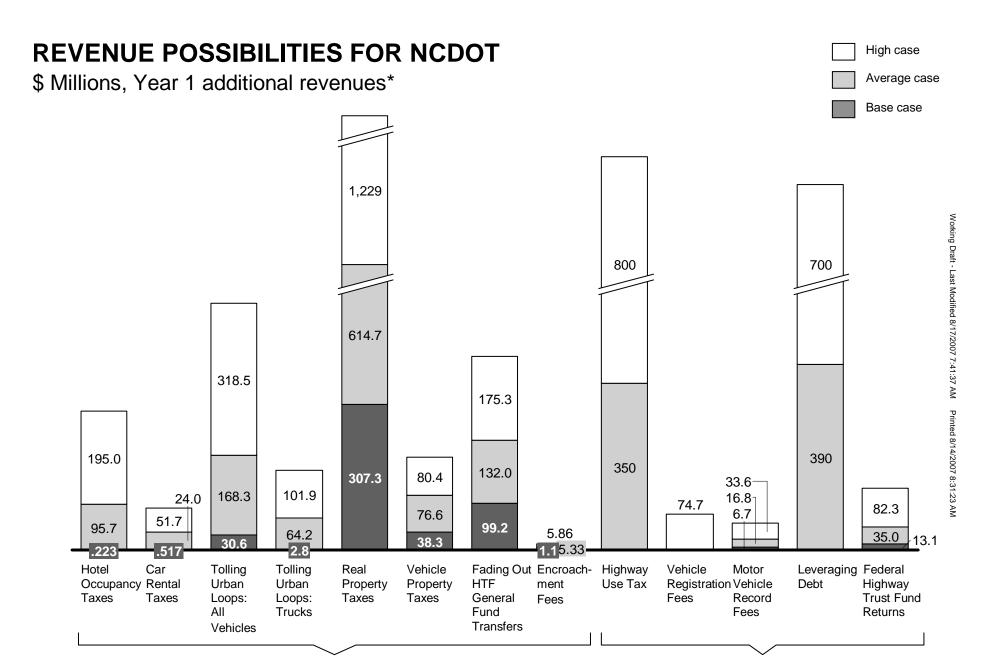
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# FOUR FORCES COMPEL SIGNIFICANT NEW INVESTMENT IN NORTH CAROLINA'S TRANSPORTATION NETWORK

NC's economy is the fastestgrowing in the Southeast



NC will be the 7<sup>th</sup>-largest state in the nation by 2030



New Sources of Funding

**Current Sources of Funding** 

<sup>\*</sup> Except Leveraging Debt, which measures additional revenues every other year over an 8-year period; and General Fund transfers, which measures average annual return over an 8-year period.

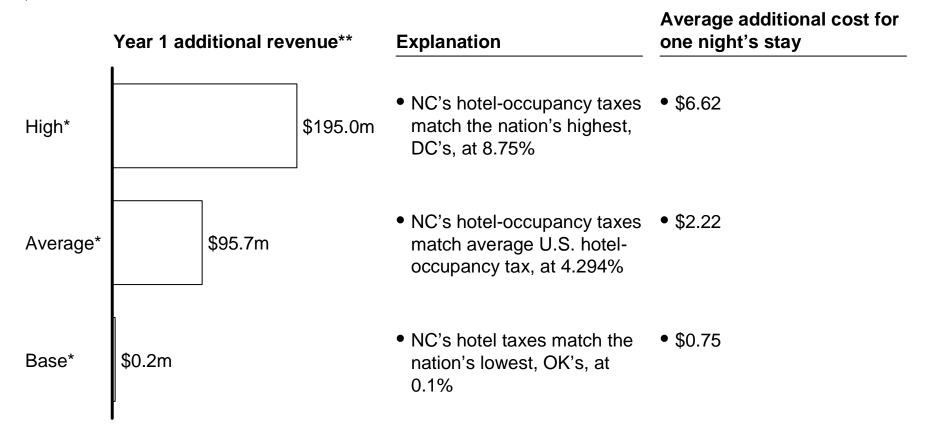
# THREE POSSIBLE FUNDING SCENARIOS COULD BEAR SIGNIFICANT FINANCIAL RETURNS FOR NCDOT

	Funding Sources Tapped	Year 1 Additional Funding	Implications
NCDOT goes for the biggest single win	<ul> <li>Local taxes on real property</li> </ul>	\$307 million-\$1.2 billion	<ul> <li>Will require probable concessions to localities</li> <li>Will cost North Carolina homeowners an additional \$54-\$216 per year</li> </ul>
NCDOT increases funding from sources most directly related to transportation	<ul> <li>Car-Rental Taxes</li> <li>Tolling Urban Loops</li> <li>Vehicle Property Taxes</li> <li>Encroachment Fees</li> <li>Highway Use Tax</li> <li>Vehicle Registration Fees</li> <li>Motor Vehicle Record Fees</li> </ul>	\$424 million-\$1.3 billion*	<ul> <li>All tax increases not likely to be approved simultaneously</li> <li>Tolling urban loops will require partnership with NCTA</li> <li>Potential impacts on telecom and utility investment in NC</li> </ul>
NCDOT focuses tax and fee increases on out- of-staters and businesses	<ul> <li>Hotel Occupancy Taxes</li> <li>Car-Rental Taxes</li> <li>Encroachment Fees</li> <li>Motor Vehicle Record Fees</li> </ul>	\$8.5 million-\$286 million*	<ul> <li>Potential impacts on state tourism</li> <li>Potential impacts on telecom and utility investment in NC</li> </ul>

<sup>\*</sup> Range assumes <u>all</u> tax and fee increases will be approved.

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## CAPTURING REVENUE FROM HOTEL-OCCUPANCY TAXES

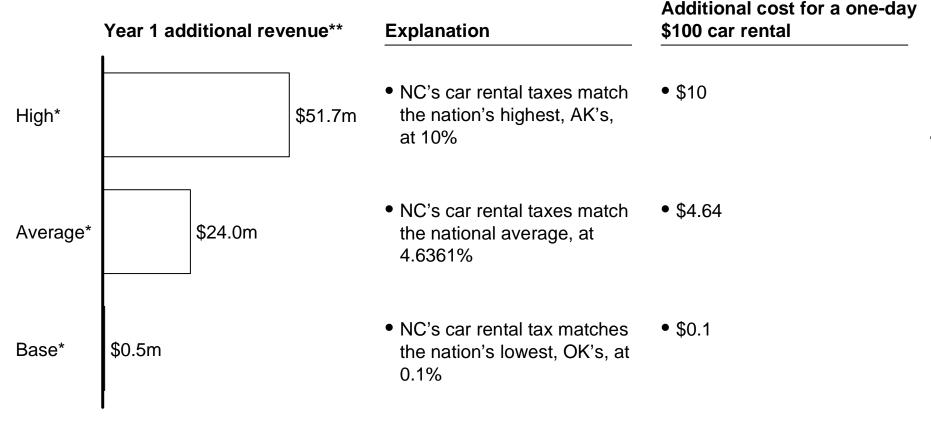


<sup>\*</sup> Benchmarking based on all U.S. states which charge hotel-occupancy taxes. For comparison purposes, amount of hotel-occupancy tax adjusted based on whether states charge hotel-occupancy tax in addition to or instead of state sales tax. For example, DC's official hotel-occupancy tax is 14%, but this is levied in place of DC sales tax of 5.25%, making effective hotel-occupancy tax 8.75%. Hawaii's official hotel-occupancy tax is 7.25% and is charged in addition to 4.712% on checkout, making effective hotel-occupancy tax 7.25%.

<sup>\*\*</sup>NC revenue estimates based on total hotel rooms in 2006 (134,390), average occupancy (60.1%), and average room price (\$75.63). Source: McKinsey research; Commerce Clearinghouse Tax Research Network.

## CAPTURING REVENUE FROM CAR RENTAL TAXES

\$ Millions



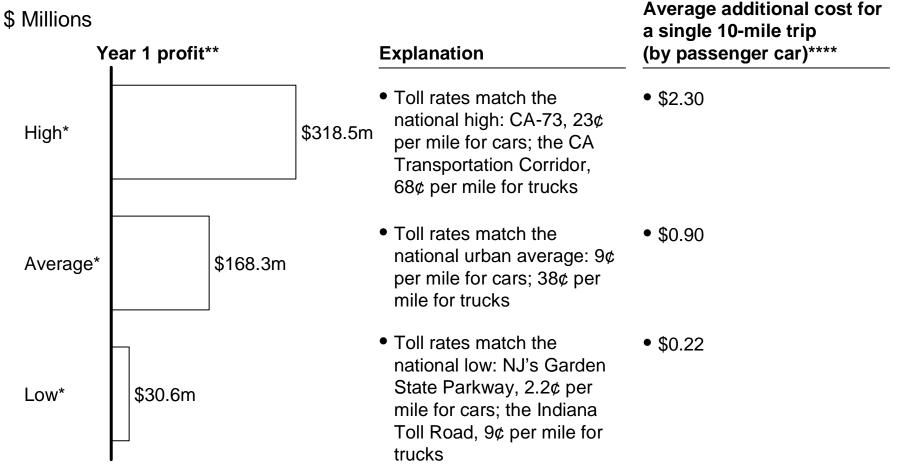
<sup>\*</sup> Benchmarking based on all U.S. states which impose car-rental taxes. For comparison purposes, amount of car-rental tax adjusted based on whether states charge car-rental tax in addition to or instead of state sales tax. For example, Maine's official car-rental tax is 10%, but this is levied in place of Maine sales tax of 5% at the time of transaction, making effective car-rental tax 5%. Minnesota's official car-rental tax is 9.2% and is charged in addition to state sales tax of 6.5% at the time of transaction, making effective car-rental tax 9.2%. Note that the states which charge flat-fee car-rental taxes, FL and NM, were not included in the calculation. Florida charges a \$2/day fee; NM charges a 5% tax and a \$2/day fee.

Source: McKinsey research; 1997 and 2002 National Economic Census; Commerce Clearinghouse Tax Research Network.

<sup>\*\*2007</sup> NC car-rental industry revenue estimated at \$517.4 million. Projection based on 1997 and 2002 National Economic Censuses, which list total U.S. revenue from the U.S. car-rental industry and NC's share of total U.S. revenue. In 2002, total U.S. car-industry revenue was \$18.6 billion; NC's share was 2.29%.

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## INSTITUTING MILEAGE-BASED TOLLING ON URBAN LOOPS: TOLLING ALL VEHICLES\*\*\*



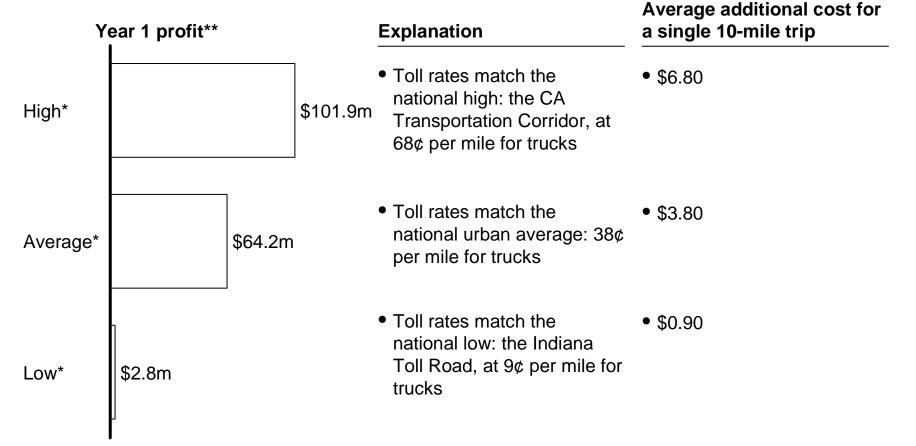
<sup>\*</sup> Benchmarking of toll rates per mile based on a selection of most toll roads in the U.S.

<sup>\*\*</sup>NC revenue estimates based on 2005 traffic counts (the last year for which data is available), expected diversion to free routes, and toll evasion rates in other states. Diversion rates are extrapolated from a scientific study in a neighboring state (effects of tolling I-81 in VA). Cost estimates based on the median operating expenses per mile of several U.S. tolling authorities, excluding initial capital expenses.

<sup>\*\*\*</sup>Future expected yearly revenue will far exceed these figures because diversion rates erode over time, highway traffic can be expected to follow past upward trends, and only 72.43 miles of a total 297.43 miles of interstate loops have been built to date.

<sup>\*\*\*\*</sup>The average additional cost over a year for a 10-mile daily commute (by car) would be \$1,150 with the high toll, \$450 with the average toll, or \$110 with the low toll.

# INSTITUTING MILEAGE-BASED TOLLING ON URBAN LOOPS: TOLLING COMMERCIAL TRUCKS ONLY\*\*\*

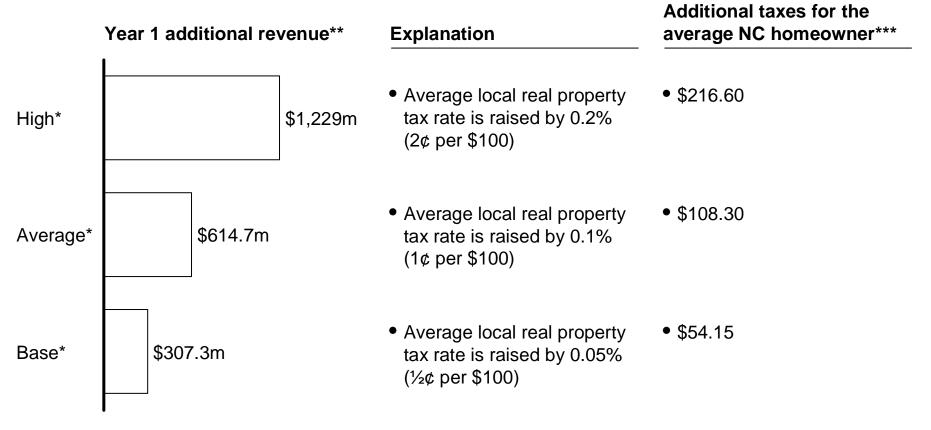


<sup>\*</sup> Benchmarking of toll rates per mile based on a selection of most toll roads in the U.S.

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## **INCREASING LOCAL TAXES ON REAL PROPERTY**



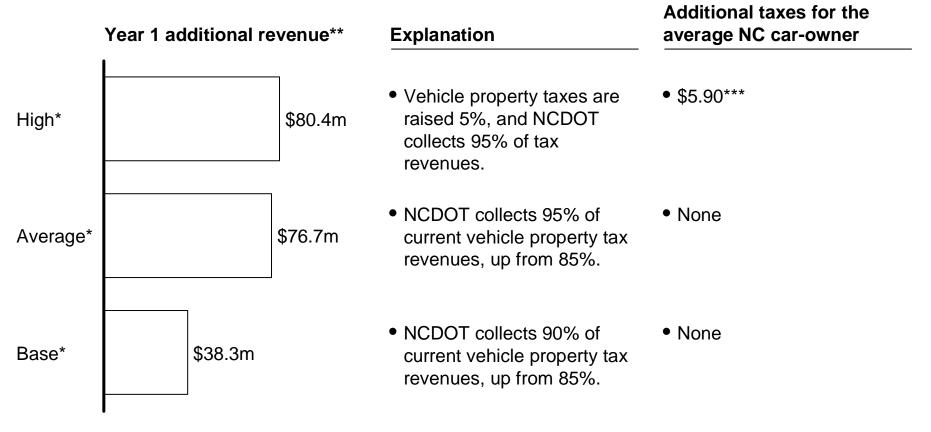
<sup>\*</sup> No localities in neighboring Southeastern states were found to have increased property taxes to fund transportation projects.

Benchmarking based on sales taxes localities in neighboring Southeastern states have added to fund transportation projects. High case is Beaufort County, SC, which charges an additional 1% sales tax to fund transportation projects. 1% was discounted to 0.2%, given recent statewide sales tax decreases.

<sup>\*\*</sup>Total valuation of real property in NC in FY2007: \$614,693,874,746.

<sup>\*\*\*</sup>Average value of a home in North Carolina in 2000: \$108,300.

## **INCREASING LOCAL VEHICLE PROPERTY TAXES**



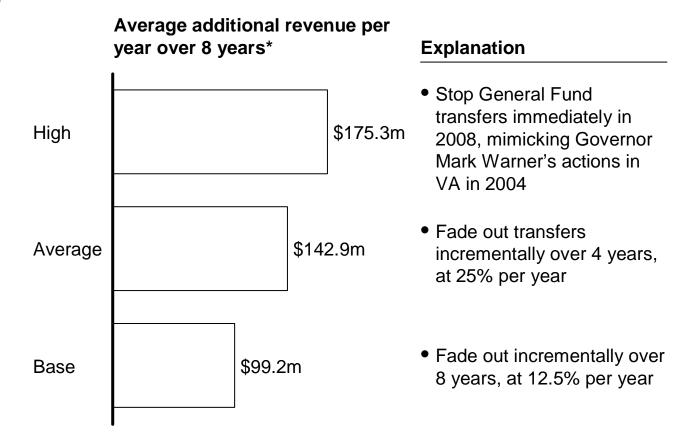
<sup>\*</sup>Based on the following assumptions: (1) Localities currently collect 85% of local vehicle property tax revenue, (2) NCDOT will have better enforcement once collection authority is transferred to it, and (3) NCDOT will be able to retain the revenues it collects over the 85% baseline.

<sup>\*\*</sup>Valuation of classified registered motor vehicles in NC in FY2007 was \$70,853,483,504. Given 1.082% average jurisdictional property tax rate, and assuming 100% collection, total NC vehicle property tax revenue for FY2007 should have been \$766,634,692. Assuming 85% collection rate, total NC vehicle property tax revenue for FY2007 was \$651,639,488.

<sup>\*\*\*</sup> A 5% increase in vehicle property taxes equals \$38.3 million in additional revenues. Total number of vehicle registrations in FY2007 was 6,493,642. \$38.3 million divided by 6,493,642 registrations equals ~\$5.90.

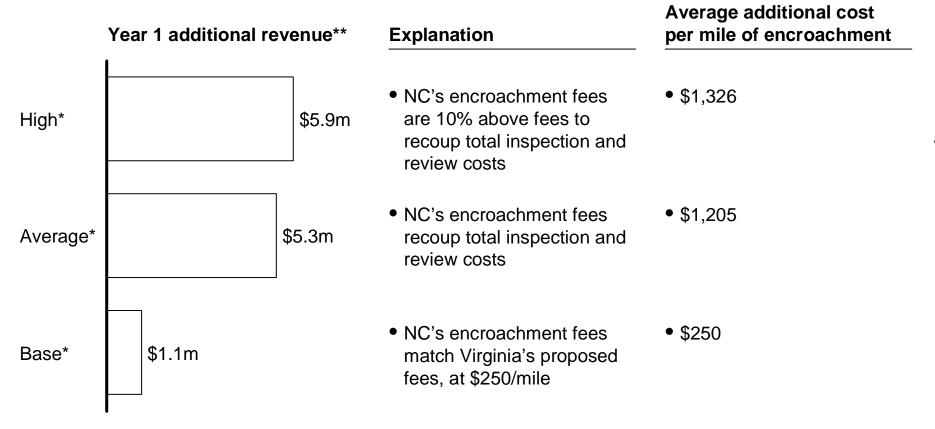
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## FADING OUT HTF TRANSFERS TO THE GENERAL FUND



## INSTITUTING ENCROACHMENT FEES

\$ Millions

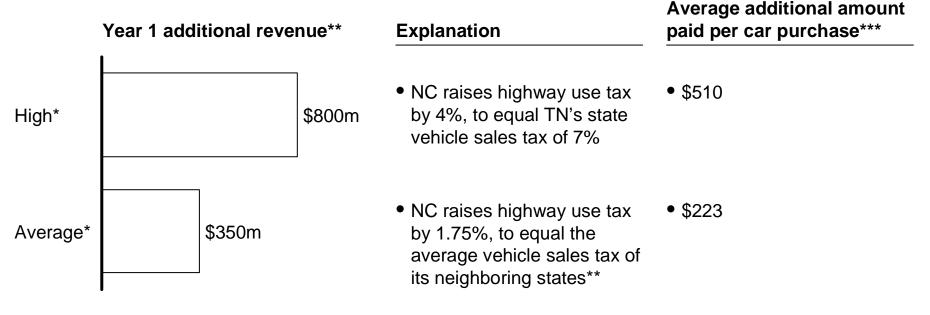


Source: NCDOT Division Managers; McKinsey research.

<sup>\*</sup> Benchmarking based on surrounding states. Only Virginia has proposed a system for charging for encroachments. This July, the Transportation Board proposed charging \$250 per mile of encroachment.

<sup>\*\*</sup>Division managers provided estimates for number of linear feet of encroachments reviewed per year in their divisions and estimates for the number and type of employees who review encroachments. Multiplying total employees per each type by pay level, we computed the total dollars spent in 2006 on reviewing and inspecting encroachments. We divided total miles of encroachments by total amount spent reviewing and inspecting to arrive at total amount spent per mile, ~\$1,205.

## RAISING THE HIGHWAY USE TAX



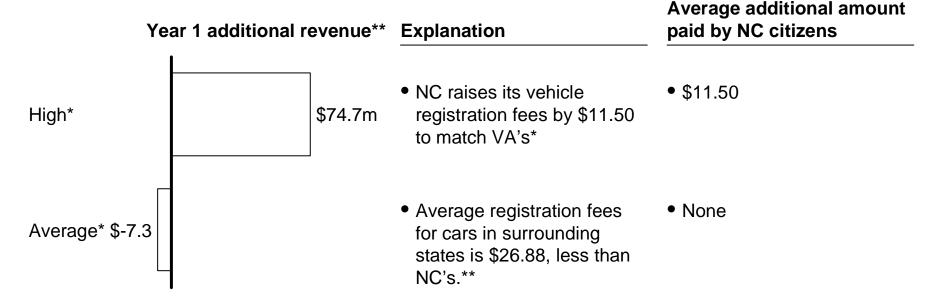
<sup>\*</sup> Benchmarking based on vehicle sales taxes in neighboring states: VA = 3%; SC = 5%; TN = 7%; GA = 4%. Average of VA, SC, TN, and GA=4.75%. Note that if Florida and Texas, whose respective state vehicle sales taxes are 6% and 6.25%, were included in the calculation of the average case, the average tax would be 5%, yielding an additional \$50 million for NC under the average-case scenario.

<sup>\*\*</sup> Based on assumption that every one percent of the Highway Use Tax yields \$200 million in revenue for the state.

<sup>\*\*\*</sup> Average price of a car in the United States in 2005 was \$12,752.

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## RAISING VEHICLE REGISTRATION FEES

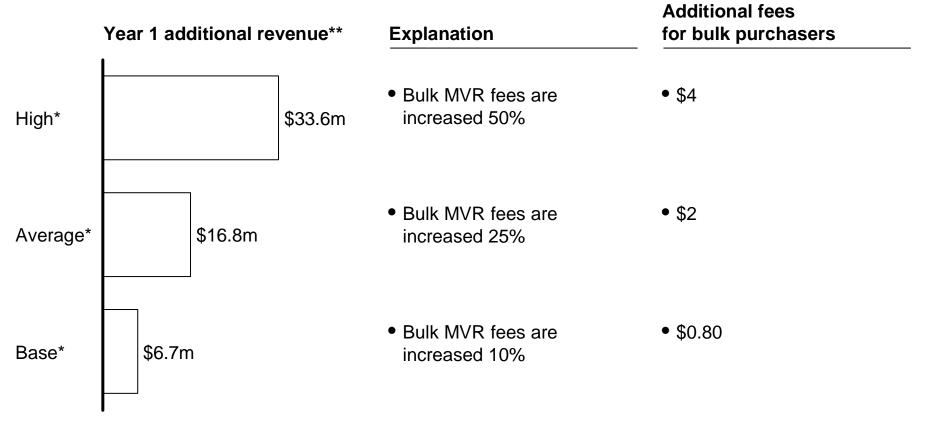


<sup>\*</sup> Benchmarking based on vehicle registration fees for private automobiles and trucks in NC's neighboring states: VA=\$39.50, SC=\$24, TN=\$24, GA=\$20

<sup>\*\*</sup> Total vehicle registrations in NC in FY2007 was 6,493,642. Note that Texas' vehicle registration fee is \$50.80. If this were considered the high case, NC's revenues would rise by \$148.1 million. Note that if Florida and Texas were included in the calculation of the average case, their vehicle registration fees, respectively at \$35.10 and \$50.80, would push the average-case rate to \$32.23. Were NC to raise its registration fees to \$32.33, it would yield an additional \$27.5 million for the state.

## RAISING MOTOR VEHICLE RECORD FEES FOR BULK PURCHASERS

## \$ Millions



Source: NC DMV.

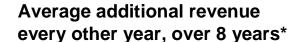
<sup>\*</sup>No benchmarking data was found on what neighboring states charge for bulk MVR requests. Average <u>individual</u> requests for neighboring states (VA, SC, TN, GA) are \$6.50 for limited MVRs and \$7.75 for certified MVRs. Highest-case in the United States is Rhode Island, which charges a \$19.50 flat fee for all record requests.

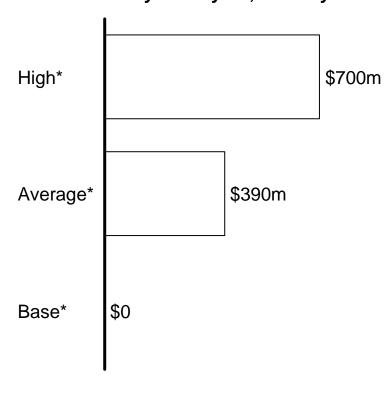
<sup>\*\*</sup>Number of bulk MVR requests in 2006 in NC was 8,393,623, at \$8 each. Total revenue from bulk requests, based on these numbers, was \$67,148,984.

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## **INCREASING NCDOT'S ABILITY TO LEVERAGE DEBT**

\$ Millions



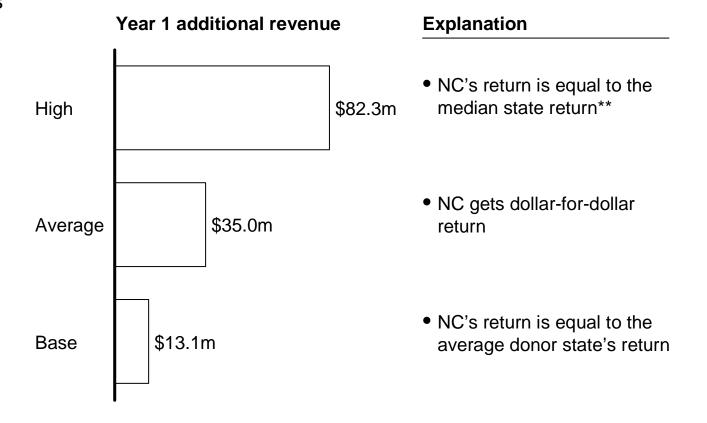


## **Explanation**

- New bonds issued every 2 years. Debt service ratio does not exceed SC's, at 10.8%
- New bonds issued every 2 years. Debt service ratio does not exceed average of surrounding states, which is 7.05%.
- No new bonds issued.
   Debt service ratio does not exceed 3.1%.

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## GETTING NC'S FAIR SHARE OF RETURNS FROM CONTRIBUTIONS TO THE FEDERAL HIGHWAY TRUST FUND\*



<sup>\*</sup> Based on historical transfers between 1957 and 2005, North Carolina's return ratio is 0.9. Average amount contributed per year between 1957 and 2005 was ~\$364 million.

<sup>\*\*</sup> Median state ratio=1.13. Median state ratio taken instead of mean state ratio to discount outlying states, e.g. Alaska, Hawaii, and the District of Columbia, whose return ratios are well above the national average. Average donor state ratio=0.94.

## **APPENDIX**

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## **EVALUATION OF OUR ESTIMATES (1 of 2)**

	Precision of Inputs	Explanation	Suggested next steps
Hotel Taxes		Good data on number of hotel rooms in NC, average occupancy in 2006, and average room price	Gather 2007 data in January 2008
Car Rental Taxes		Revenue projections for NC car-rental industry based on 1997 and 2002 National Economic Census	Cross-check with 2007 National Economic Census; contact Alaska and Minnesota Departments of Revenue to check profitability of tax
Tolling Urban Loops		Average distance traveled by cars estimated; diversion rates projected based on data from other U.S. roads	Get more exact measures of distance traveled on loops; pilot toll program on one section of one loop to assess diversion rates
Real Property Taxes		Good data on valuation of real property in NC, but unknown what proportion of taxes are actually collected	Identify what proportion of real property taxes are actually collected
Vehicle Property Taxes		Good data on valuation of vehicle property in NC, but unknown what proportion of taxes are actually collected	Identify what proportion of vehicle property taxes are actually collected
HTF General Fund Transfers		General Fund transfers can change significantly from year to year	Monitor OSBM revenue projections

=precise data for inputs; =very good data, but some lack of clarity; =good data, but variability year to year; =data based on estimates

## **EVALUATION OF OUR ESTIMATES (2 of 2)**

	Precision of Inputs	Explanation	Suggested next steps
Encroachment Fees		Very rough estimates of number and length of encroachments, as well as time spent in review and inspection, made by division managers	For one year, conduct exact record- keeping of number and length of encroachments per division, and hour spent reviewing encroachments
Highway Use Tax		Estimates based on rule of thumb that every one percent of the Highway Use Tax produces \$200 million in revenue	Get exact numbers on number of vehicles sold per year in North Carolina and average vehicle price
Registration Fees		Good data on numbers of automobiles and light trucks sold in North Carolina in 2006	Benchmark other states around the U.S. to see what the highest-case registration fees are
MVR Fees		Good data on number of bulk MVRs sold last year	Assess growth rates from year to yea
Leveraging Debt		Good debt affordability assumptions drawn from State Treasurer's "Debt Affordability Study 2007," but minor adjustments due to bond market fluctuations may be needed.	Request that State Treasurer's office review calculations
Fair Share of Returns		Good data on historical payments to and allocations and apportionments from Federal Highway Trust Fund, 1957-2005, but variability year to year	Assess on a year-by-year basis

## **STATE TAX PROFILES**

Sales	Income (Low-High)	Property
4.25	6-8	Local
4	2-5.75	Local
6	2.5-7	Local
4	1-6	Local
7	Limited to Dividends and Interest	Local
	4 6	<ul> <li>4.25</li> <li>6-8</li> <li>2-5.75</li> <li>2.5-7</li> <li>1-6</li> <li>Limited to Dividends and</li> </ul>

Source: FTA

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## **DETAILED DATA FOR TOLLING URBAN LOOPS**

### **Tolling Urban Loops**

### **REVENUE SUMMARY**

				Low toll on trucks only	Avg toll on trucks only yearly	High toll on trucks only
Loop	Low toll yearly revenue	Average toll yearly revenue	High toll yearly revenue	yearly revenue	revenue	yearly revenue
	(includes cars and trucks)	(includes cars and trucks)	(includes cars and trucks)	(includes trucks only)	(includes trucks only)	(includes trucks only)
Charlotte	33,468,147.41	127,315,190.47	229,644,632.80	14,559,183.35	56,374,734.76	82,101,310.04
Raleigh	9,538,916.96	36,286,712.10	65,452,116.47	4,149,582.57	16,067,633.11	23,400,087.52
Greensboro	5,513,767.28	20,974,759.17	37,833,198.45	2,398,577.60	9,287,552.26	13,525,920.98
Durham	599,200.63	2,279,401.40	4,111,467.74	260,661.93	1,009,311.21	1,469,909.76
TOTAL	\$49.120.032.29	\$186.856.063.14	\$337.041.415.46	\$21,368,005,45	\$82,739,231,35	\$120.497.228.30

### COST SUMMARY

Loop Cost

 Charlotte
 11,705,713.82

 Raleigh
 3,401,244.20

 Greensboro
 3,283,341.23

 Durham
 174,291.34

 TOTAL
 \$18,564,590.59

### PROFIT SUMMARY

Loop	Low toll yearly profit	Average toll yearly profit	High toll yearly profit	Low toll on trucks profit	Avg toll on trucks only profit	High toll on trucks profit
Charlotte	21,762,433.59	115,609,476.65	217,938,918.98	2,853,469.53	44,669,020.94	70,395,596.22
Raleigh	6,137,672.76	32,885,467.90	62,050,872.28	748,338.37	12,666,388.92	19,998,843.33
Greensboro	2,230,426.05	17,691,417.93	34,549,857.22	-884,763.63	6,004,211.03	10,242,579.74
Durham	424,909.29	2,105,110.07	3,937,176.40	86,370.59	835,019.88	1,295,618.42
TOTAL	\$30,555,441.70	\$168,291,472.55	\$318,476,824.87	\$2,803,414.86	\$64,174,640.76	\$101,932,637.71

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## **DETAILED DATA FOR TRANSPORTATION TAXES AND FEES**

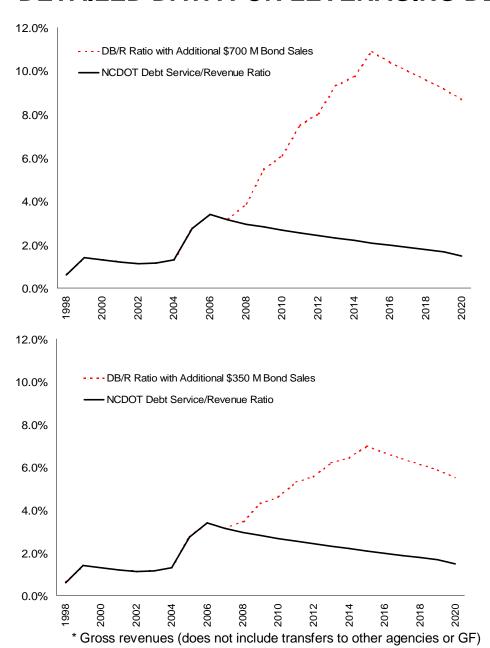
Bringing North Carolina's Taxes and Fees Up to Par with Other States

Source	NC	VA	sc	TN	GA	Average	NC Volume**	FY 2007 Revenue	Average Case (\$)	Change (\$)	High Case (\$)	Change (\$)
TRANSPORTATION TAXES												
State Motor Fuel Tax (c/g)	0.297	0.175	0.16	0.2	0.213	0.187	5,326,948,532	\$1,582,103,714.00	\$996,139,375.48	(\$585,964,338.52)	\$1,582,103,714.00	\$0.00
State Vehicle Sales Tax (%)	0.03	0.03	0.05	0.07	0.04	0.0475	N/A	\$605,047,356.00	\$1,005,047,356.00	\$350,000,000.00	\$1,405,047,356.00	\$800,000,000.00
TRANSPORTATION FEES												
Registration Fees	28	39.5	24	24	20	26.875	6,493,642	\$181,821,976.00	\$174,516,628.75	(\$7,305,347.25)	\$256,498,859.00	\$74,676,883.00
Drivers Licenses (\$/year)	4	4	2.5	3.9	4	3.6	6,900,000	\$27,600,000.00	\$24,840,000.00	(\$2,760,000.00)	\$27,600,000.00	\$0.00
Certificates of Title (\$)	\$40	10	15	10.5	18	\$13.38	2,455,482	\$98,219,280.00	\$32,842,071.75	(\$65,377,208.25)	\$98,219,280.00	\$0.00

<sup>\*</sup>Highway Use Tax in NC

<sup>\*\*</sup>Volume in (1) Gallons, (2)%, (3) Number of automobiles and light trucks sold, (4) Number of driver's licenses, (5) Number of title transactions

## **DETAILED DATA FOR LEVERAGING DEBT**



### **Debt Structuring Assumptions**

- •4% rate
- •15 year maturity
- •Annual Principal payment (approximately 1/15 of bond amount)
- •Semi-annual interest payment

### **Revenue Projections**

- •From NCDOT Long-Range (25 revenue projections)
  - -Motor Fuel Gas Tax capped at 29.9 cents
  - -Highway Fund\* average annual growth 1.33%
  - -Highway Trust Fund\* average annual growth 1.83%

# Perspective on Funding Sources for NCDOT

August 20, 2007



## Outline

- •General Current Funding Information
- •McKinsey's Findings

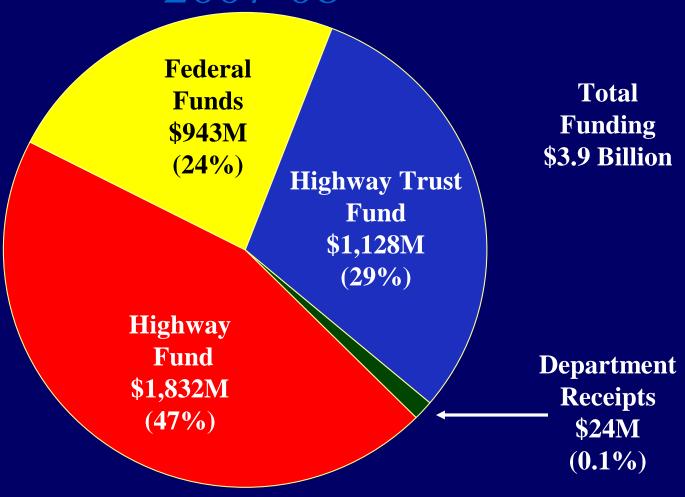


## Outline

- •General Current Funding Information
- •McKinsey's Findings

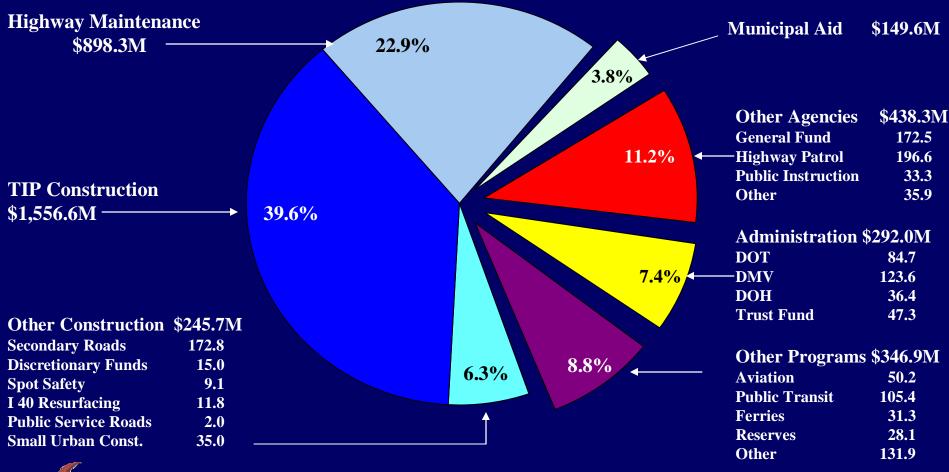


# Sources of Funds 2007-08





# Projected Uses Funds 2007-08





## State Transportation Revenue Sources



Motor Fuel Tax 55%

Highway Use Tax 25%

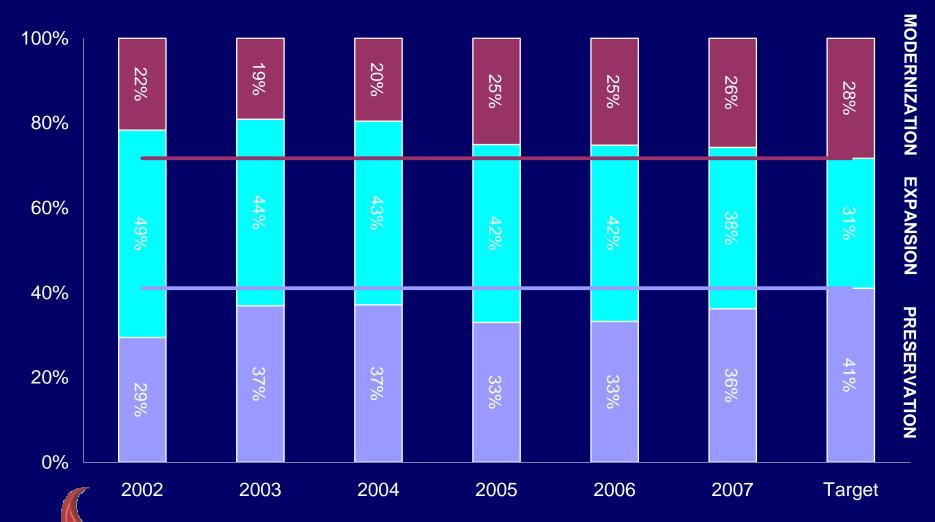
Fees 20%



1¢ MFT = \$55M/yr 5.5B gallons/year

1% = \$200M/yr  $50^+$  Fees Trade-in = \$110/yr

# LONG RANGE PLAN Investment Strategy (Expenditures by State Fiscal Year)



## Outline

- •General Current Funding Information
- McKinsey's Findings



# Compelling Forces for Additional Transportation Investments

Fastest-growing economy in the Southeast

Ambitious system-wide goals

Pressing need for funding significantly above current levels

New priorities will require new funding





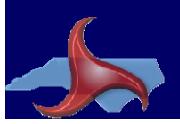
## SUMMARY

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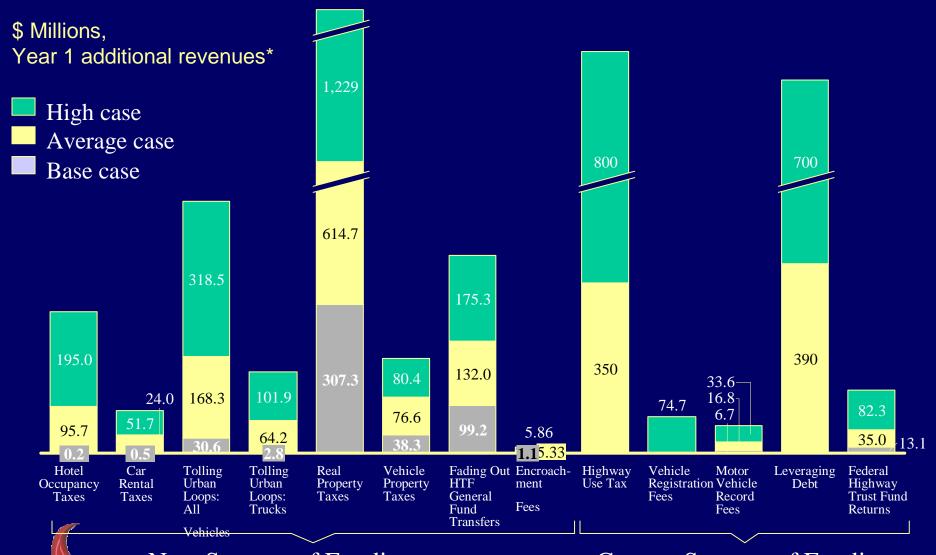
- Explore new funding sources
- Explore increasing current sources

Combine funding alternatives

- -Shot-in-the arm
- -Tapping transportation related sources
- —Increases on businesses and out-of-state citizens taxes and fees



## REVENUE POSSIBILITIES



New Sources of Funding

**Current Sources of Funding** 

## POSSIBLE FUNDING SCENARIOS

**Funding Sources Tapped** 

Year 1 Additional Funding

**Potential or Probable Implications** 

Shot in the Arm

• Local taxes on real property

\$307 million to \$1.2 billion

- Concessions to localities
- Additional homeowners annual expense \$54-\$216

**Tapping** transportation related sources

- Car-Rental Taxes
- Tolling Urban Loops
- Vehicle Property TaxesEncroachment Fees
- Highway Use Tax
- Vehicle Registration Fees

\$424 million to \$1.3 billion\*

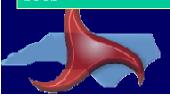
- Not all likely to be approved simultaneously
- NCTA partnership required
- Impacts on telecom and utility investments

**Increases on** businesses and out-of-state citizens taxes and fees

- Motor Vehicle Record Fees
- Hotel Occupancy Taxes
- Car-Rental Taxes
- Encroachment Fees
- Motor Vehicle Record Fees

\$8.5 million to \$286 million\*

- Impacts on state tourism
- Impacts on telecom and utility investments



<sup>\*</sup> Range assumes all tax and fee increases will be approved.